

# INSWING FRENCH DOOR

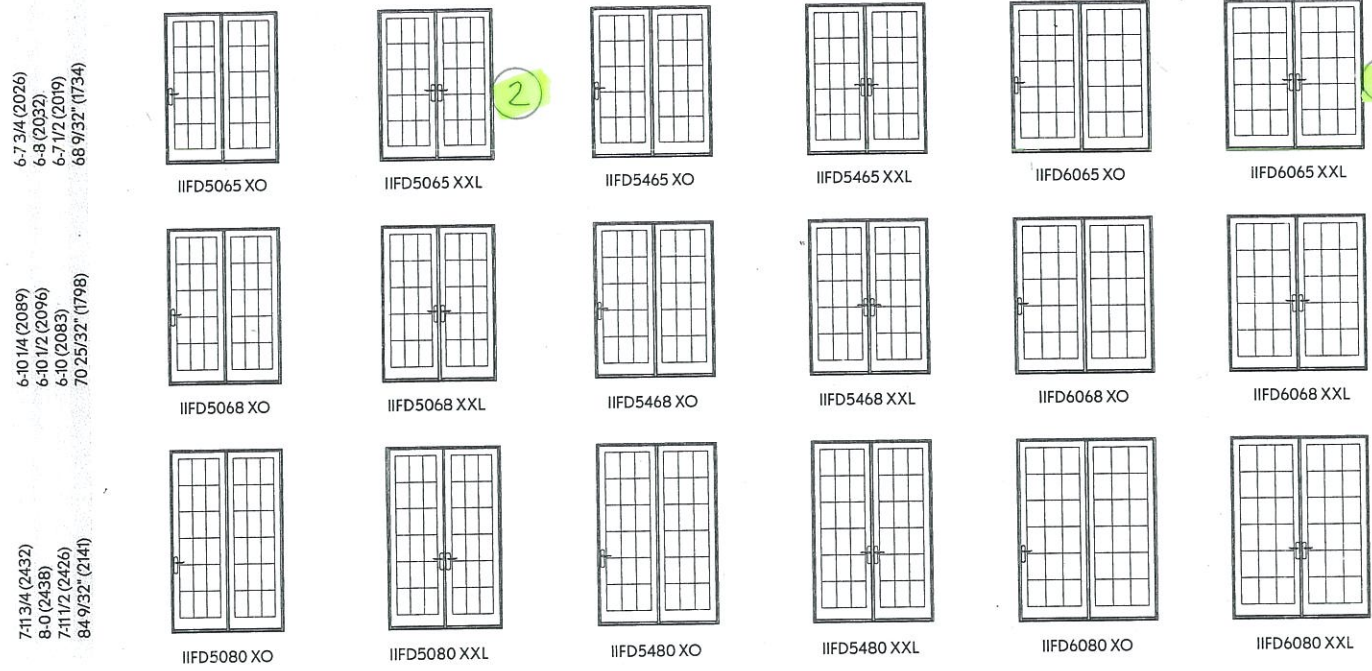
INTEGRITY® FROM MARVIN®  
WOOD-ULTREX™ SERIES

## Inswing French Doors

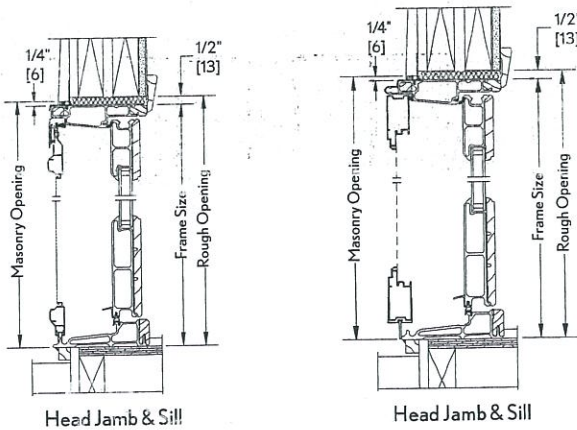
Mas. Opp. (mm) 4-11 1/2 (1511)  
Rgh. Opp. (mm) 5-0 (1524)  
Frame Size (mm) 4-11 (1499)  
Glass Size (mm) 22 19/32" (574)

5-3 1/2 (1613)  
5-4 (1626)  
5-3 (1600)  
24 19/32" (625)

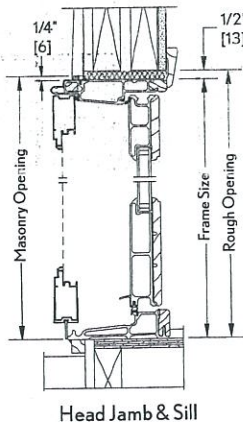
5-11 1/2 (1816)  
6-0 (1829)  
5-11 (1803)  
24 10/32" (726)



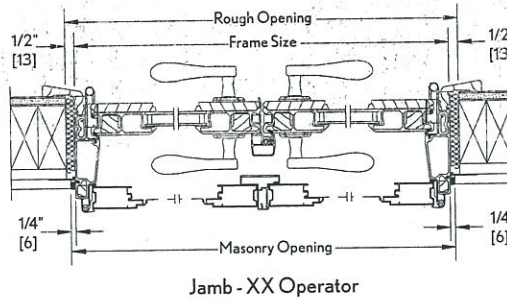
## Construction Details



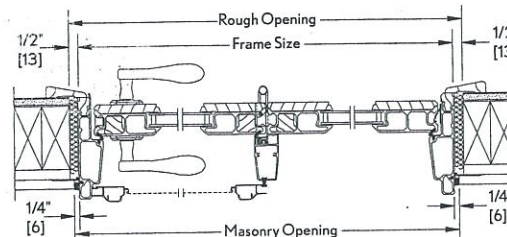
Direct Glaze  
Transom Over Inswing  
French Door



Vertical Mullion  
O-XO operator



Jamb - XX Operator



Jamb - XO Operator

# INSWING FRENCH DOOR

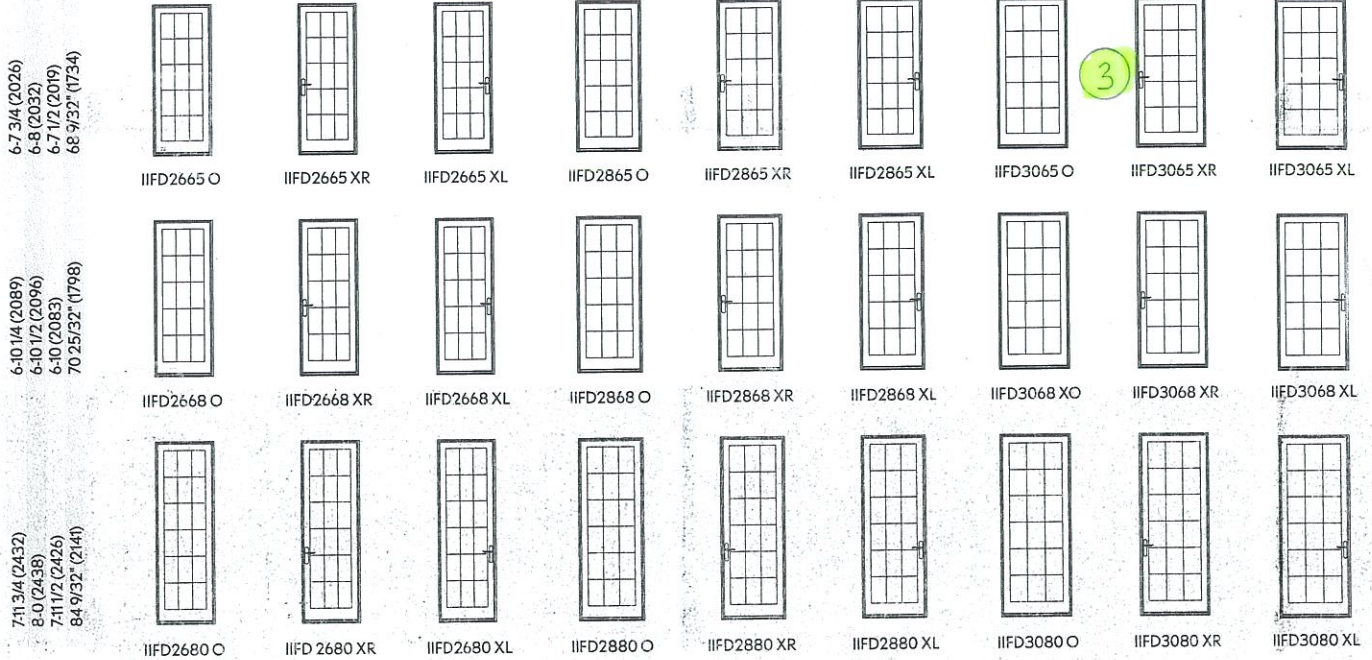
## Inswing French Doors

Mas. Opg. (mm)  
Rgh. Opg. (mm)  
Frame Size (mm)  
Glass Size (mm)

2-6 13/16 (783)  
2-7 5/16 (796)  
2-6 5/16 (770)  
22 19/32" (574)

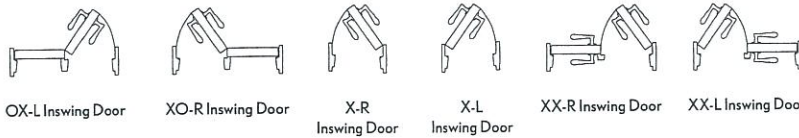
2-8 13/16 (834)  
2-9 5/16 (846)  
2-8 5/16 (821)  
24 19/32" (625)

3-0 13/16 (935)  
3-1 5/16 (948)  
3-0 5/16 (923)  
28 19/32" (726)



## Inswing Door Operation

X signifies an operating door panel, O means stationary. Listing the panels in a door starts from the left to the right, looking from the exterior.



Details and Elevations not to scale.

\*2 panel XO also available in OX.

\*\*2 and 3 panel XX configuration also available in XX R.

O = Stationary X = Operator  
L = Left Hand Panel R = Right Hand Panel

Optional Inswing French Door Grilles, GBGs, SDLs and SDLs with Spacer Bar are available in a standard Rectangular cut shown. Other available lite cuts on page 39.

## Inswing French Door Direct Glaze Transoms

Mas. Opg. (mm)  
Rgh. Opg. (mm)  
Frame Size (mm)  
Glass Size (mm)

3-0 13/16 (935)  
3-1 5/16 (948)  
3-0 5/16 (923)  
33 1/2" (851)

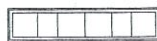
5-11 1/2 (1816)  
6-0 (1829)  
5-11 (1803)  
68 3/16" (1732)

8-11 13/16 (2738)  
9-0 5/16 (2751)  
8-11 5/16 (2726)  
104 1/2" (2654)

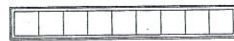
1-4 (406)  
1-4 1/4 (413)  
1-3 3/4 (400)  
12 15/16" (329)



IIFDG3616



IIFDG7216



IIFDG10816

Transom units have a 2" jamb extension for 6 9/16" jambs or a 2 1/4" jamb extension for 6 13/16" jambs. When ordering 6 9/16" or 6 13/16" jambs, add 1/4" to width and 1/8" to height of Frame Size (FS), Rough Opening (RO), or Masonry Opening (MO).

Optional Direct Glaze transom Grilles, GBGs, SDLs and SDLs with Spacer Bar are available in a standard Rectangular cut, as shown. Alternate transom lite cuts available to align with select lite cut options shown on page 39.

## MULTIPLE ASSEMBLIES

Multiple assembly units can be factory mulled up to 3 units wide by 1 unit high, Maximum Rough Opening not to exceed 109 15/16" x 96"; or 2 units wide by 2 units high, maximum Rough Opening not to exceed 73 5/8" x 100 1/2". Field mull kits available for up to 3 units wide by 2 units high not to exceed 110" x 112". True Half Round transoms are available field mulled only. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity from Marvin representative for more information.



# CASEMENT

## Operator/Stationary Units

Mas. Opg. (mm)	1-4 1/2 (419)	1-8 1/2 (521)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	3-0 1/2 (927)
Rgh. Opg. (mm)	1-5 (432)	1-9 (533)	2-1 (635)	2-5 (737)	2-9 (838)	3-1 (940)
Frame Size (mm)	1-4 (406)	1-8 (508)	2-0 (610)	2-4 (711)	2-8 (813)	3-0 (914)
Glass Size (mm)	1113/16" (300)	1513/16" (402)	1913/16" (503)	2313/16" (605)	2713/16" (706)	3113/16" (808)
2-7 3/8 (797) 2-7 5/8 (803) 2-7 7/8 (791) 26 15/16" (684)						
2-11 3/8 (898) 2-11 5/8 (905) 2-11 7/8 (892) 30 15/16" (786)						
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 7/8 (994) 34 15/16" (887)						
3-7 1/2 (1105) 3-7 3/4 (1111) 3-7 1/4 (1099) 39 1/16" (992)						
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 7/8 (1197) 42 15/16" (1091)						
4-7 3/8 (1406) 4-7 5/8 (1413) 4-7 7/8 (1400) 50 15/16" (1294)						
4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 7/8 (1502) 54 15/16" (1395)						
5-3 3/8 (1610) 5-3 5/8 (1616) 5-3 7/8 (1603) 58 15/16" (1497)						
5-11 3/8 (1813) 5-11 5/8 (1819) 5-11 7/8 (1807) 66 15/16" (1700)						

4

10

# DOUBLE HUNG

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WOOD-ULTREX™ SERIES

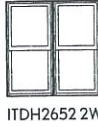
## Wide Operator Units

Mas. Opp. (mm)	3-7 1/2 (1105)	4-3 1/2 (1308)	4-11 1/2 (1511)	5-3 1/2 (1613)	5-7 1/2 (1715)	5-11 1/2 (1816)	6-3 1/2 (1918)	6-11 1/2 (2121)
Rgh. Opp. (mm)	3-8 (1118)	4-4 (1321)	5-0 (1524)	5-4 (1626)	5-8 (1727)	6-0 (1829)	6-4 (1930)	7-0 (2134)
Frame Size (mm)	3-7 (1092)	4-3 (1295)	4-11 (1499)	5-3 (1600)	5-7 (1702)	5-11 (1803)	6-3 (1905)	6-11 (2108)

4-4 (135)  
4-4 1/4 (1327)  
4-3 3/4 (1314)



ITDH2252 2W



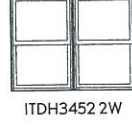
ITDH2652 2W



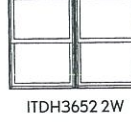
ITDH3052 2W



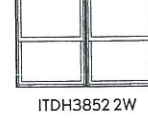
ITDH3252 2W



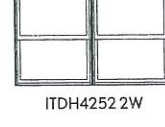
ITDH3452 2W



ITDH3652 2W



ITDH3852 2W

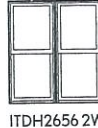


ITDH4252 2W

3 (1422)  
4-8 1/4 (1429)  
4-7 3/4 (1416)



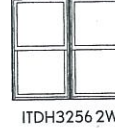
ITDH2256 2W



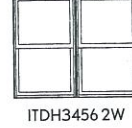
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ITDH3056 2W



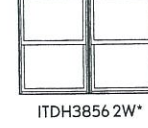
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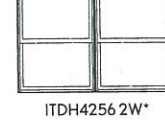
ITDH3456 2W



ITDH3656 2W



ITDH3856 2W\*

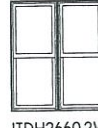


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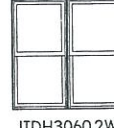
324  
5-0 1/4 (1530)  
4-11 3/4 (1518)



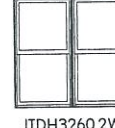
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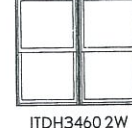
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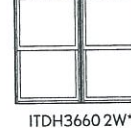
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ITDH3260 2W



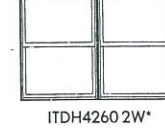
ITDH3460 2W



ITDH3660 2W\*

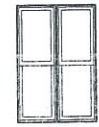


ITDH3860 2W\*

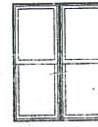


ITDH4260 2W\*

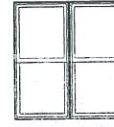
5-1 (1619)  
5-4 1/4 (1632)  
5-3 3/4 (1619)



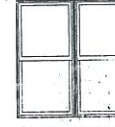
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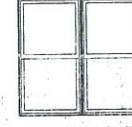
ITDH2664 2W



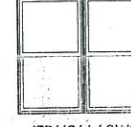
ITDH3064 2W



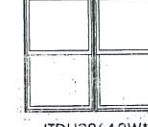
ITDH3264 2W\*



ITDH3464 2W\*



ITDH3664 2W\*



ITDH3864 2W\*



ITDH4264 2W\*

5-8 (1727)  
5-8 1/4 (1734)  
5-7 3/4 (1721)



ITDH2268 2W



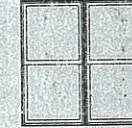
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ITDH3068 2W



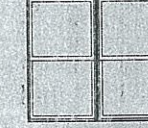
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ITDH3468 2W



ITDH3668 2W



ITDH3868 2W\*

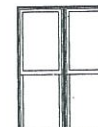


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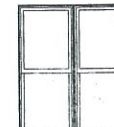
6-0 (1829)  
6-0 1/4 (1835)  
5-11 3/4 (1822)



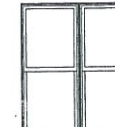
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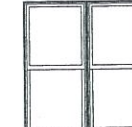
ITDH2672 2W



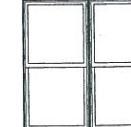
ITDH3072 2W\*



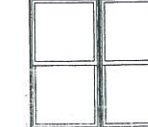
ITDH3272 2W\*



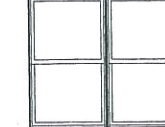
ITDH3472 2W\*



ITDH3672 2W\*

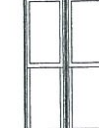


ITDH3872 2W\*

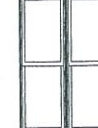


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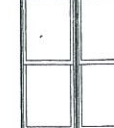
6-4 (1930)  
6-4 1/4 (1937)  
6-3 3/4 (1924)



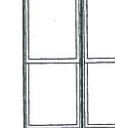
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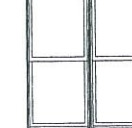
ITDH2676 2W



ITDH3076 2W\*



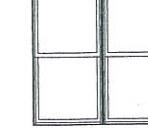
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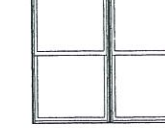
ITDH3476 2W\*



ITDH3676 2W\*



ITDH3876 2W\*



ITDH4276 2W\*

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# CASEMENT

## 3 Wide Operator/Stationary Units

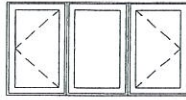
Mas. Opg. (mm) 4-0 1/2 (1232)  
 Rgh. Opg. (mm) 4-1 (1245)  
 Frame Size (mm) 4-0 (1219)

5-0 1/2 (1537)  
 5-1 (1549)  
 5-0 (1524)

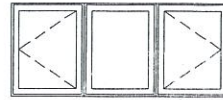
6-0 1/2 (1842)  
 6-1 (1854)  
 6-0 (1829)

7-0 1/2 (2146)  
 7-1 (2159)  
 7-0 (2134)

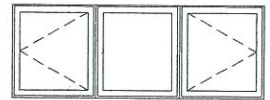
2-7 3/8 (797)  
 2-7 5/8 (803)  
 2-7 1/8 (791)



ICA2131 3W

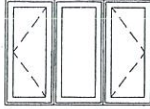


ICA2531 3W

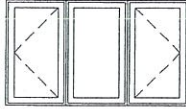


ICA2931 3W

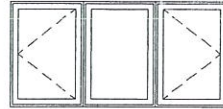
2-11 3/8 (898)  
 2-11 5/8 (905)  
 2-11 1/8 (892)



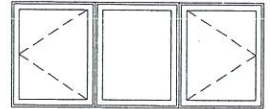
ICA1735 3W



ICA2135 3W

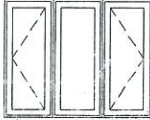


ICA2535 3W

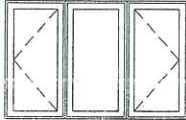


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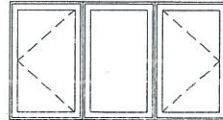
3-3 3/8 (1000)  
 3-3 5/8 (1006)  
 3-3 1/8 (994)



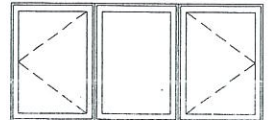
ICA1739 3W



ICA2139 3W

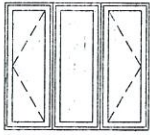


ICA2539 3W

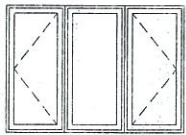


ICA2939 3W

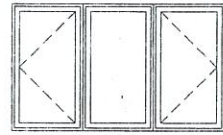
3-7 1/2 (1105)  
 3-7 3/4 (1111)  
 3-7 1/4 (1099)



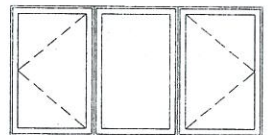
ICA1743 3W



ICA2143 3W

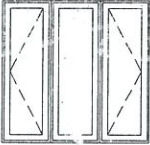


ICA2543 3W

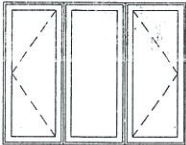


ICA2943 3W\*

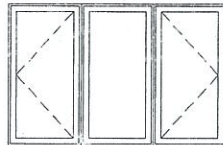
3-11 3/8 (1203)  
 3-11 5/8 (1210)  
 3-11 1/8 (1197)



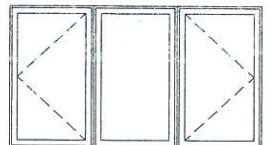
ICA1747 3W



ICA2147 3W

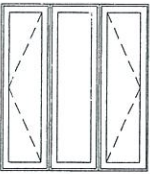


ICA2547 3W

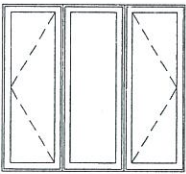


ICA2947 3W\*

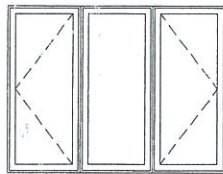
4-7 3/8 (1406)  
 4-7 5/8 (1413)  
 4-7 1/8 (1400)



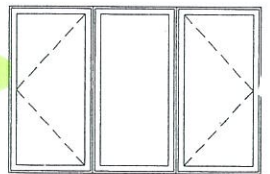
ICA1755 3W



ICA2155 3W

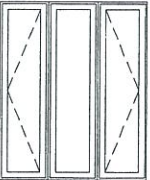


ICA2555 3W

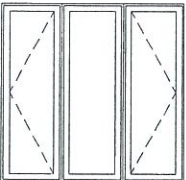


ICA2955 3W\*

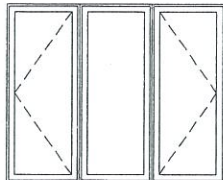
4-11 3/8 (1508)  
 4-11 5/8 (1514)  
 4-11 1/8 (1502)



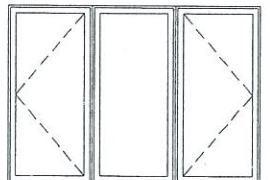
ICA1759 3W



ICA2159 3W

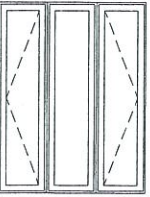


ICA2559 3W

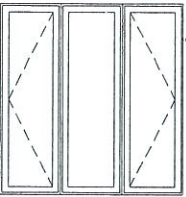


ICA2959 3W\*

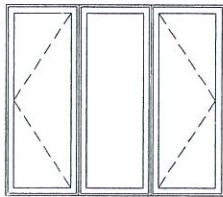
5-3 3/8 (1610)  
 5-3 5/8 (1616)  
 5-3 1/8 (1603)



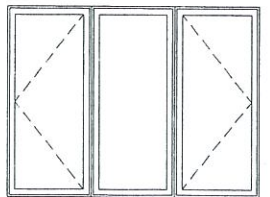
ICA1763 3W



ICA2163 3W

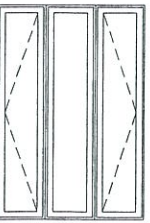


ICA2563 3W

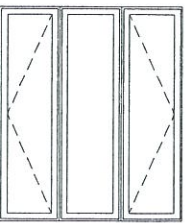


ICA2963 3W\*

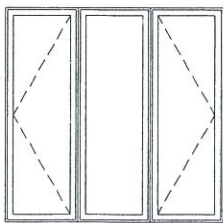
5-11 3/8 (1813)  
 5-11 5/8 (1819)  
 5-11 1/8 (1807)



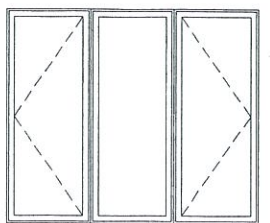
ICA1771 3WT



ICA2171 3WT



ICA2571 3WT



ICA2971 3WT\*

6



# DOUBLE HUNG

## Operator Units

<b>Mas. Opg. (mm)</b>	1-10 (559)	2-2 (660)	2-6 (762)	2-8 (813)	2-10 (864)	3-0 (914)	3-2 (965)	3-6 (1067)
<b>Rgh. Opg. (mm)</b>	1-10 1/2 (572)	2-2 1/2 (673)	2-6 1/2 (775)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-6 1/2 (1080)
<b>Frame Size (mm)</b>	1-9 1/2 (546)	2-1 1/2 (648)	2-5 1/2 (749)	2-7 1/2 (800)	2-9 1/2 (851)	2-11 1/2 (902)	3-1 1/2 (953)	3-5 1/2 (1054)
<b>Glass Size (mm)</b>	16 3/4" (425)	20 3/4" (527)	24 3/4" (629)	26 3/4" (679)	28 3/4" (730)	30 3/4" (781)	32 3/4" (832)	36 3/4" (933)

5-8 (1727) 5-8 1/4 (1734) 5-7 3/4 (1721) 30 3/4" (781)	(S.O. 1.8 x 5-6) ITDH2268	(S.O. 2.0 x 5-6) ITDH2668	(S.O. 2.4 x 5-6) ITDH3068*	(S.O. 2.6 x 5-6) ITDH3268*	(S.O. 2.8 x 5-6) ITDH3468	(S.O. 2.10 x 5-6) ITDH3668*	(S.O. 3.0 x 5-6) ITDH3868*	(S.O. 3.4 x 5-6) ITDH4268*
6-0 (1829) 6-0 1/4 (1835) 5-11 3/4 (1822) 30 3/4" (832)	(S.O. 1.8 x 5-10) ITDH2272	(S.O. 2.0 x 5-10) ITDH2672	(S.O. 2.4 x 5-10) ITDH3072*	(S.O. 2.6 x 5-10) ITDH3272*	(S.O. 2.8 x 5-10) ITDH3472*	(S.O. 2.10 x 5-10) ITDH3672*	(S.O. 3.0 x 5-10) ITDH3872*	(S.O. 3.4 x 5-10) ITDH4272*
6-4 (1930) 6-4 1/4 (1937) 6-3 3/4 (1924) 34 3/4" (883)	(S.O. 1.8 x 6-2) ITDH2276	(S.O. 2.0 x 6-2) ITDH2676	(S.O. 2.4 x 6-2) ITDH3076*	(S.O. 2.6 x 6-2) ITDH3276*	(S.O. 2.8 x 6-2) ITDH3476*	(S.O. 2.10 x 6-2) ITDH3676*	(S.O. 3.0 x 6-2) ITDH3876*	(S.O. 3.4 x 6-2) ITDH4276*

Details and Elevations not to scale.

Optional Double Hung Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Other available lite cuts shown on page 39.

When ordering 6 7/16" (167 mm) jambs, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

\* These windows meet National Egress Codes for fire evacuation. Local codes may differ.

Available in Cottage Style with unequal sash. Cottage Style Glass size (min) 36 3/4" (933) / 24 3/4" (629).

## 2 Wide Operator Units

<b>Mas. Opg. (mm)</b>	3-7 1/2 (1105)	4-3 1/2 (1308)	4-11 1/2 (1511)	5-3 1/2 (1613)	5-7 1/2 (1715)	5-11 1/2 (1816)	6-3 1/2 (1918)	6-11 1/2 (2121)
<b>Rgh. Opg. (mm)</b>	3-8 (1118)	4-4 (1321)	5-0 (1524)	5-4 (1626)	5-8 (1727)	6-0 (1829)	6-4 (1930)	7-0 (2134)
<b>Frame Size (mm)</b>	3-7 (1092)	4-3 (1295)	4-11 (1499)	5-3 (1600)	5-7 (1702)	5-11 (1803)	6-3 (1905)	6-11 (2108)

3-0 (914) 3-0 1/4 (921) 2-11 3/4 (908)	ITDH2236 2W	ITDH2636 2W	ITDH3036 2W	ITDH3236 2W	ITDH3436 2W	ITDH3636 2W	ITDH3836 2W	ITDH4236 2W
3-4 (1016) 3-4 1/4 (1022) 3-3 3/4 (1010)	ITDH2240 2W	ITDH2640 2W	ITDH3040 2W	ITDH3240 2W	ITDH3440 2W	ITDH3640 2W	ITDH3840 2W	ITDH4240 2W
3-8 (1176) 3-8 1/4 (1182) 3-7 3/4 (1161)	ITDH2244 2W	ITDH2644 2W	ITDH3044 2W	ITDH3244 2W	ITDH3444 2W	ITDH3644 2W	ITDH3844 2W	ITDH4244 2W
4-0 (1219) 4-0 1/4 (1226) 3-11 3/4 (1213)	ITDH2248 2W	ITDH2648 2W	ITDH3048 2W	ITDH3248 2W	ITDH3448 2W	ITDH3648 2W	ITDH3848 2W	ITDH4248 2W

# CASEMENT

## 2 Wide Operator/Stationary Units

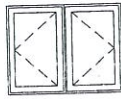
Mas. Opg. (mm) 2-8 1/2 (826)  
 Rgh. Opg. (mm) 2-9 (838)  
 Frame Size (mm) 2-8 (813)

3-4 1/2 (1029)  
 3-5 (1041)  
 3-4 (1016)

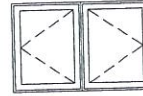
4-0 1/2 (1232)  
 4-1 (1245)  
 4-0 (1219)

4-8 1/2 (1435)  
 4-9 (1448)  
 4-8 (1422)

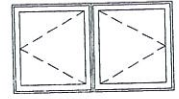
2-7 3/8 (797)  
 2-7 5/8 (803)  
 2-7 1/8 (791)



IICA21312W



ICA25312W

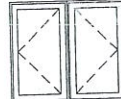


ICA29312W

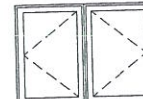
2-11 3/8 (898)  
 2-11 5/8 (905)  
 2-11 1/8 (892)



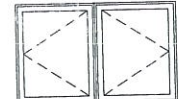
ICA1735 2W



ICA2135 2W



ICA2535 2W



ICA2935 2W

3-3 3/8 (1000)  
 3-3 5/8 (1006)  
 3-3 1/8 (994)



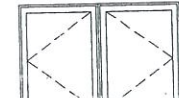
ICA1739 2W



ICA2139 2W



ICA2539 2W

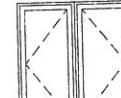


ICA2939 2W

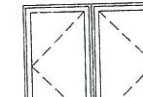
3-7 1/2 (1105)  
 3-7 3/4 (1111)  
 3-7 1/4 (1099)



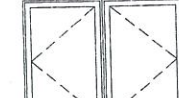
ICA1743 2W



ICA2143 2W

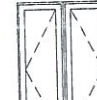


ICA2543 2W

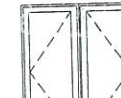


ICA2943 2W\*

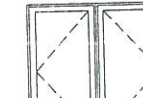
3-11 3/8 (1203)  
 3-11 5/8 (1210)  
 3-11 1/8 (1197)



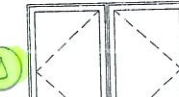
ICA1747 2W



ICA2147 2W



ICA2547 2W

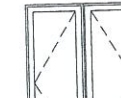


ICA2947 2W\*

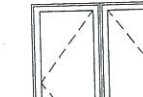
4-7 3/8 (1406)  
 4-7 5/8 (1413)  
 4-7 1/8 (1400)



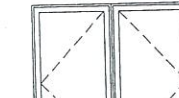
ICA1755 2W



ICA2155 2W



ICA2555 2W

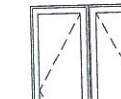


ICA2955 2W\*

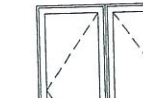
4-11 3/8 (1508)  
 4-11 5/8 (1514)  
 4-11 1/8 (1502)



ICA1759 2W



ICA2159 2W



ICA2559 2W



ICA2959 2W\*

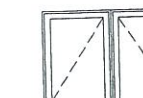
5-3 3/8 (1610)  
 5-3 5/8 (1616)  
 5-3 1/8 (1603)



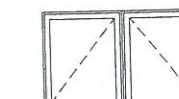
ICA1763 2W



ICA2163 2W



ICA2563 2W

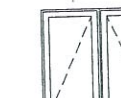


ICA2963 2W\*

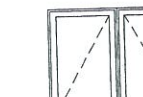
5-11 3/8 (1813)  
 5-11 5/8 (1819)  
 5-11 1/8 (1807)



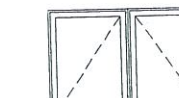
ICA1771 2W



ICA2171 2W



ICA2571 2W



ICA2971 2W\*

9







### Integrity Casement Round Top by Marvin

ENERGY DATA	U-Value	R-Value	SHGC	VT	ENERGY STAR
Insulating Glass/LoE <sup>2</sup> -Air	0.33	3.03	0.37	0.65	
Insulating Glass/LoE <sup>2</sup> -Argon	0.29	3.45	0.37	0.65	N, NC
Insulating Glass/LoE <sup>2</sup> -Air-GBG	0.33	3.03	0.34	0.58	
Insulating Glass/LoE <sup>2</sup> -Argon-GBG	0.29	3.45	0.34	0.58	N, NC
Insulating Glass/LoE <sup>2</sup> -Air-SDL	0.33	3.03	0.34	0.58	
Insulating Glass/LoE <sup>2</sup> -Argon-SDL	0.29	3.45	0.34	0.58	N, NC
Insulating Glass/LoE <sup>3</sup> -366-Air	0.32	3.13	0.25	0.58	NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon	0.28	3.57	0.25	0.58	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-GBG	0.32	3.13	0.23	0.52	NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-GBG	0.28	3.57	0.22	0.52	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDL	0.32	3.13	0.23	0.52	NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDL	0.28	3.57	0.22	0.52	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDLS	0.33	3.03	0.23	0.52	SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDLS	0.29	3.45	0.22	0.52	N, NC, SC, S

### Integrity Double Hung Round Top by Marvin

ENERGY DATA	U-Value	R-Value	SHGC	VT	ENERGY STAR
Insulating Glass/LoE <sup>2</sup> -Air	0.32	3.13	0.36	0.61	NC
Insulating Glass/LoE <sup>2</sup> -Argon	0.28	3.57	0.36	0.61	N, NC
Insulating Glass/LoE <sup>2</sup> -Air-GBG	0.32	3.13	0.32	0.55	NC
Insulating Glass/LoE <sup>2</sup> -Argon-GBG	0.28	3.57	0.32	0.55	N, NC
Insulating Glass/LoE <sup>2</sup> -Air-SDL	0.32	3.13	0.32	0.55	NC
Insulating Glass/LoE <sup>2</sup> -Argon-SDL	0.28	3.57	0.32	0.55	N, NC
Insulating Glass/LoE <sup>3</sup> -366-Air	0.32	3.13	0.24	0.55	NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon	0.28	3.57	0.23	0.55	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-GBG	0.32	3.13	0.22	0.50	NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-GBG	0.28	3.57	0.21	0.50	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDL	0.32	3.13	0.22	0.50	NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDL	0.28	3.57	0.21	0.50	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDLS	0.33	3.03	0.22	0.50	SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDLS	0.29	3.45	0.21	0.50	N, NC, SC, S

### Integrity Direct Glaze Transom/Polygon

ENERGY DATA	U-Value	R-Value	SHGC	VT	ENERGY STAR
Insulating Glass/LoE <sup>2</sup> -Air	0.31	3.23	0.33	0.61	NC
Insulating Glass/LoE <sup>2</sup> -Argon	0.27	3.70	0.33	0.61	N, NC
Insulating Glass/LoE <sup>2</sup> -Air-GBG	0.31	3.23	0.30	0.54	NC, SC
Insulating Glass/LoE <sup>2</sup> -Argon-GBG	0.27	3.70	0.30	0.54	N, NC, SC
Insulating Glass/LoE <sup>2</sup> -Air-SDL	0.31	3.23	0.30	0.54	NC, SC
Insulating Glass/LoE <sup>2</sup> -Argon-SDL	0.27	3.70	0.30	0.54	N, NC, SC
Insulating Glass/LoE <sup>3</sup> -366-Air	0.30	3.33	0.24	0.51	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon	0.27	3.70	0.22	0.51	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-GBG	0.30	3.33	0.21	0.45	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-GBG	0.27	3.70	0.20	0.45	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDL	0.30	3.33	0.21	0.45	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDL	0.27	3.70	0.20	0.45	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDLS	0.31	3.23	0.21	0.45	NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDLS	0.27	3.70	0.20	0.45	N, NC, SC, S

### Integrity Sliding Patio Door

ENERGY DATA	U-Value	R-Value	SHGC	VT	ENERGY STAR
Insulating Glass/LoE <sup>2</sup> -Air	0.32	3.33	0.34	0.58	
Insulating Glass/LoE <sup>2</sup> -Argon	0.28	3.57	0.34	0.58	
Insulating Glass/LoE <sup>2</sup> -Air-GBG	0.32	3.33	0.30	0.51	N, NC, SC, S
Insulating Glass/LoE <sup>2</sup> -Argon-GBG	0.28	3.57	0.30	0.51	N, NC, SC, S
Insulating Glass/LoE <sup>2</sup> -Air-SDL	0.32	3.13	0.30	0.51	N, NC, SC, S
Insulating Glass/LoE <sup>2</sup> -Argon-SDL	0.28	3.57	0.30	0.51	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air	0.32	3.13	0.23	0.52	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon	0.28	3.57	0.22	0.52	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-GBG	0.32	3.13	0.20	0.46	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-GBG	0.28	3.57	0.20	0.46	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDL	0.32	3.13	0.20	0.46	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDL	0.28	3.57	0.20	0.46	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDLS	0.33	3.03	0.20	0.46	
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDLS	0.29	3.45	0.20	0.46	N, NC, SC, S

### Integrity Sliding French Door

ENERGY DATA	U-Value	R-Value	SHGC	VT	ENERGY STAR
Insulating Glass/LoE <sup>2</sup> -Air	0.33	3.03	0.29	0.50	
Insulating Glass/LoE <sup>2</sup> -Argon	0.30	3.33	0.29	0.50	N, NC, SC, S
Insulating Glass/LoE <sup>2</sup> -Air-GBG	0.33	3.03	0.26	0.43	
Insulating Glass/LoE <sup>2</sup> -Argon-GBG	0.30	3.33	0.26	0.43	N, NC, SC, S
Insulating Glass/LoE <sup>2</sup> -Air-SDL	0.33	3.03	0.26	0.43	
Insulating Glass/LoE <sup>2</sup> -Argon-SDL	0.30	3.33	0.26	0.43	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air	0.33	3.03	0.20	0.45	
Insulating Glass/LoE <sup>3</sup> -366-Argon	0.29	3.33	0.19	0.45	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-GBG	0.33	3.03	0.17	0.39	
Insulating Glass/LoE <sup>3</sup> -366-Argon-GBG	0.29	3.33	0.17	0.39	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDL	0.33	3.03	0.17	0.39	
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDL	0.29	3.33	0.17	0.39	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDLS	0.34	2.94	0.17	0.39	
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDLS	0.31	3.23	0.17	0.39	N, NC, SC, S

### Integrity Inswing French Door

ENERGY DATA	U-Value	R-Value	SHGC	VT	ENERGY STAR
Insulating Glass/LoE <sup>2</sup> -Air	0.33	3.03	0.28	0.47	
Insulating Glass/LoE <sup>2</sup> -Argon	0.30	3.33	0.27	0.47	N, NC, SC, S
Insulating Glass/LoE <sup>2</sup> -Air-GBG	0.33	3.03	0.24	0.40	
Insulating Glass/LoE <sup>2</sup> -Argon-GBG	0.30	3.33	0.24	0.40	N, NC, SC, S
Insulating Glass/LoE <sup>2</sup> -Air-SDL	0.33	3.03	0.24	0.40	
Insulating Glass/LoE <sup>2</sup> -Argon-SDL	0.30	3.33	0.24	0.40	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air	0.32	3.13	0.19	0.42	
Insulating Glass/LoE <sup>3</sup> -366-Argon	0.29	3.45	0.18	0.42	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-GBG	0.32	3.13	0.16	0.36	
Insulating Glass/LoE <sup>3</sup> -366-Argon-GBG	0.29	3.45	0.16	0.36	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDL	0.32	3.13	0.16	0.36	
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDL	0.29	3.45	0.16	0.36	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDLS	0.34	2.94	0.16	0.36	
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDLS	0.31	3.23	0.16	0.36	N, NC, SC, S

### Integrity Outswing French Door

ENERGY DATA	U-Value	R-Value	SHGC	VT	ENERGY STAR
Insulating Glass/LoE <sup>2</sup> -Air	0.33	3.03	0.28	0.47	
Insulating Glass/LoE <sup>2</sup> -Argon	0.30	3.33	0.28	0.47	N, NC, SC, S
Insulating Glass/LoE <sup>2</sup> -Air-GBG	0.33	3.03	0.24	0.40	
Insulating Glass/LoE <sup>2</sup> -Argon-GBG	0.30	3.33	0.24	0.40	N, NC, SC, S
Insulating Glass/LoE <sup>2</sup> -Air-SDL	0.33	3.03	0.24	0.40	
Insulating Glass/LoE <sup>2</sup> -Argon-SDL	0.30	3.33	0.24	0.40	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air	0.33	3.03	0.19	0.42	
Insulating Glass/LoE <sup>3</sup> -366-Argon	0.30	3.33	0.18	0.42	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-GBG	0.33	3.03	0.17	0.36	
Insulating Glass/LoE <sup>3</sup> -366-Argon-GBG	0.30	3.33	0.16	0.36	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDL	0.33	3.03	0.17	0.36	
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDL	0.30	3.33	0.16	0.36	N, NC, SC, S
Insulating Glass/LoE <sup>3</sup> -366-Air-SDLS	0.34	2.94	0.17	0.36	
Insulating Glass/LoE <sup>3</sup> -366-Argon-SDLS	0.31	3.23	0.16	0.36	N, NC, SC, S

Thermal and solar values are subject to update. Values are generated in accordance with NFRC 100-2004 and other applicable NFRC procedures. Argon gas is not available for the altitudes that require capillary tubes. Values are select glazing options, for those options not listed please contact the factory.

SHGC = Solar Heat Gain Coefficient  
VT = Visible Light Transmittance

SDL = Without Spacer Bar  
SDLS = With Spacer Bar

ENERGY STAR codes:  
N = Northern  
NC = North Central  
SC = South Central  
S = Southern

3.1mm glass thickness shown